

ABSTRACT

Embodiments of a system and method for establishing reliable connections between peers in a peer-to-peer networking environment. In one embodiment, a reliable communications channel may use transmit and receive windows, acknowledgement of received messages, and retransmission of messages not received to provide reliable delivery of messages between peers in the peer-to-peer environment. In one embodiment, each message may include a sequence number configured for use in maintaining ordering of received messages on a receiving peer. A communications channel may make multiple hops on a network, and different hops in the connection may use different underlying network protocols. Communications channels may also pass through one or more firewalls and/or one or more gateways on the network. A communications channel may also pass through one or more router (relay) peers on the network. The peers may adjust the sizes of the transmit and receive window based upon reliability of the connection.

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